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ABSTRACT

Listening research spans the last half-century of American scientific study. Many methodologies overlap to define this complex subject of interactive communication: the Neopositivist, Systems, Gestaltist, Rules, Phenomenological, Hermeneutical, Critical, Ethnomethodological, Coordinated Management of Meaning, and others. Several theories and methods within each of the Neopositivist, Systems, and Phenomenological methodologies are exemplified, and one theory/model from each is critiqued for use in multimethod research. Four basic research method types are discussed with recommendations for theory specificity and merging processes. Appendixes present two listening comprehension models and the Vicary/Steil comparison chart. Contains 62 references and 2 tables of data. (Author)

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The Methodology, Theory, and Research of Listening Comprehension

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Running Head: LISTENING COMPREHENSION OVERVIEW

Abstract

Listening research spans the last half-century of American scientific study. Many methodologies overlap to define this complex subject of interactive communication: The Neopositivist, Systems, Gestaltist, Rules, Phenomenological, Hermeneutical, Critical, Ethnomethodological, Coordinated Management of Meaning, and others. Several theories and methods within each of the Neopositivist, Systems, and Phenomenological methodologies are exemplified, and one theory/model from each is critiqued for use in multimethod research. Four basic research method types are discussed with recommendations for theory specificity and merging processes.

The Methodology, Theory, and Research of Listening Comprehension

A preponderance of mass communicated data necessitates the need to listen intently with discernment. The topic of listening comprehension has grown as a feasible and necessary area for scholarly activity. Cambridge University offers a Ph.D. in listening comprehension, yet this communication topic has been largely ignored by twentieth century scholars. Its methodologies vary from the received view of the communication discipline adaption from psychology to the phenomenological pondering of perception to the pragmatic consulting and training viewpoints. Individuals from the fields of education, industry, government, medicine, training and development, and the media do exchange listening research ideas in pertinent organizations like the International Listening Association and its journal. Since 1980, individual objectivity and understanding has been promoted through listening theory, research and practice begun with the "Father of Listening," Ralph G. Nichols. See Appendix A, International Listening Association brochure.

The behaviors associated with listening can be taught or acquired in normal interpersonal communication. Listening takes time, maturity in the individual, and a reasonable amount of human oriented intelligence. Its study requires a methodology that brings these characteristics to light.

Cultural and background differences arise in communication setting and timing. Maturity and social awareness of others is difficult to measure because of the variability of humans. Inate human intelligence directed toward the self and others has been approached from many areas of scholarship unaware of communication endeavors. Practical needs of the populace and monetary or personal gain shape the listening patterns of individuals. These are not easily understood or changed. The purpose of this overview is to provide a comparison of the methodologies available for listening comprehension research, their incumbent theories, and the actual methods and results of prominent research of the last several decades.

Three theories are of particular interest to the future of this vital topic: (1) The *Psychologie der Massenkommunikation* Model (Maletzke, 1963), (2) Listening Skills Training motivated by the S.I.E.R. Model (Steil, 1983), and (3) The Subliminal Perception Theory of James M. Vicary (Cousins, 1957, Advertising Age, 1957). They are of opposing viewpoints. The latter two contain a mixed methodology, yet these two perspectives are heuristically provocative for the fields of education, communication, medicine and business. The first model undergirds modern views of listening as a complex and linear subject within the Neopositivist view.

Dubin's (1978) and Chaffee & Berger's (1987) criteria will be used to judge the merits of these representative scholarly thrusts. The research methods used to test them produce individual limitations, strengths, and possibilities for the rapidly growing field. Methodological overlap is seen as supportive. Current methods entail the experimental, survey, fieldwork, and nonreactive possibilities. Trend observations and recommendations follow this metatheoretical overview.

In listening research, individual subjects have been studied for reading and aural comprehension, in small group settings as well as public listening experiences. Many research studies focus on second language acquisition, gender receptivity, and religious listening. Zen Buddhism offers interesting documented case studies of intentional, trained listening comprehension behavior. In psychophysics the search for auditory and perceptual thresholds requires models that will predict values below which there is no perception of sight and sound. Such limiting values may be absolute or they may represent a limit approached but never reached (Dubin, p. 168). Particular methods and results of findings will be listed with their value for each methodology and future scholarly activity.

Theory-building in listening and its attendant research cover broad areas. By noting the differing methodological approaches, a clearer understanding for assimilation of knowledge and future research can be gained.

The Methodologies

Neopositivism stands alone as an influential force in the accumulation of knowledge in this century. Encyclopedic accounts of listening study stem from behavioral psychology's pure objectivity stance. Attention is described as a focused and directed awareness (Schlosberg, 1991). Psychological entreaties are seen to fall within the Neopositivism camps of Structuralist (clearness levels), Functionalist (utility and determiners), and Behaviorist (nonmental). The attention portion of the listening act is presented and tested as an integration concerned with eye movement, posturing, inhibition, and facilitation. (Schlosberg, p. 202).

Other listening authorities, Watson (1914) and Treisman (1991), note such descriptors as degree of efficiency, perceptual limitation, involuntariness, intensity, and orientation. Motive to listen is an influential predictor of what and when listening occurs. These scholars call for a full analysis of the attentive act in order to corroborate and focus both research and theory-building. Memory is yet another area within the Neopositive methodology. Watson, especially, heralded an avoidance of consciousness in the psychological sense when objectively researching listening. This

seriously conflicts with the Phenomenological methodology.

The Systems methodology combines with that of the Gestaltist and Rules approaches. It can incorporate both Phenomenology and Neopositivism in its broader awareness of entities and their cyclic interrelations. It is far more difficult to test Systems theories because of time, funding and availability of infrequent elements. Most research on listening is not based on theory and there is little replication, or contradictory results (Witkin, 1990). The Systems viewpoint is seen as the one most often taken. Overlapping disciplines such as communication, speech science, pathology, audiology, cognitive and humanistic psychology, and therapeutic communication place other methodologies within a Systems framework. Obviously, other criteria for journal acceptability are necessary for these qualitative, syncretic hybrids (Polkinghorne, 1983).

A Gestalt whole, indivisible or cyclical, is much like the Systems methodology. Although this viewpoint springs from Phenomenological thinking, it is often employed as a Systems methodology in American research. Perception occurs when the senses are stimulated, a multi-faceted communication procedure in humans. Adoption of the Phenomenological method reinforced adoption of the Gestaltist model (Hamelyn, 1957, p. 112). The Systems functional viewpoint demands interpretation (experience), classification, and identification. Philosophical issues tend to be submerged in scientific guise. Stimulation research and theory-building mandates sufficient conditions of seeing certain ways (Hamelyn, p. 114). Quite specifically, this penchant for closed System thought drives psychologists to neurology for theories.

Rules structure that is context-inherent also lends itself to Systems-similar research. These approaches or roots of common orientation comprise nuances of the second methodology available for advancement in listening comprehension knowledge.

The third and oldest methodology, Phenomenology, is most difficult to compare with these first two orientations. Its theoretic product can be insightful, but it is rarely expressed in Dubin's classical terms. Unless research is employed utilizing interview and field experience in the life of the subjective researcher, verification of its rigorous premises is difficult. Experimental testing of Phenomenological premises rarely grants validity to this form of knowledge acquisition. The passage of time and subsequent thought patterns of peer-philosophers cement Phenomenology's contributions to the study of listening. Its tenets cannot be unearthed by simple hypothetical statements; careful pondering of voluminous texts is necessary. Neopositivistic and Systems methodologies utilize its findings, however.

Although specific, Phenomenological truths do not often venture past the realm of concise description, a necessary ingredient in the labeling and understanding of constituent elements in any theory or model. Phenomenology studies listening perception for its own sake (Hamlyn, 1961, pp. 172-173). Platonic emphasis of essence and the search for pure experience brackets all ways of seeing (presuppositions and methodologies). The only absolute knowledge is consciousness and its presentation to the individual scientist of basic appearances. These fixed structures of consciousness come by intuitive grasp of the essence of listening (Polkinghorne, pp. 40-41). No theory-framing can exist in this open examination of a form and its reduction to terms.

As early as 1959, R. Brain's lectures set forth a comprehensive philosophical view of perception which exalted the imagination. Any philosophy, including Neopositivism, is personal autobiography, a mode of truth apprehension. Brain saw truth as clothed and rarely naked or absolute. When apprehending, the mind also experiences sensations that it has projected. This is the subjective clothing of external things which Phenomenology accepts as valid and concrete knowledge. Empirical sense-data are historically opposed to perceptual-data, an essence necessary to the listening process. Perceptual-data (Phenomenology) rejects causal views of perception (Brain, p. 58). All knowledge, both subjective and objective, is necessary because reality is a relationship between humans and their actions. Hermeneutic and Critical methodologies simply take Phenomenology into interpretative and implicative depths.

The individual developing methodologies of Coordinated Management of Meaning, Ethnomethodology and several others will not be discussed although they are formulated and do shepherd some theory and research. A closer examination of theories and models within the Neopositivistic, Systems, and Phenomenological methodologies will produce the three exemplars beneficial for critique.

Theories and Models

Listening research entails a broad perspective and there seems to be no central focus. Twelve models of listening are analyzed by Wolvin from 1956 to 1986, one of which is the S.E.I.R. model chosen for critique. The philosophical roots of listening stem from Hiedegger and Schliermacher, perhaps even Aristotle (Wilkins, 1990). As a result, listening is seen as a transactional phenomenon in humans, animals, and perhaps even plants or inanimate objects. Polkinghorne (1983) emphasizes that context and assumptions about complex phenomena are connected to an entire system, not just one theoretical framework (p. 96). It may not be possible for humans to understand or test the extensive boundaries of such systems. Dubin

(1978) adds that "order in human experiences is not directly derivable from the orderliness of the experiences themselves" (p. 6). Observers, even scientific, objective ones, create content categories, labels, and understanding by either projection or recollection. It is important to remember that theories and the methodologies they proceed from serve human purposes (p. 7).

Neopositivistic Theory and Modeling

Psychology and the speech and hearing sciences provide a thorough undergirding of Neopositivist theory adaptable to listening research. Several theories exemplify this tradition. Selective Attention Theory follows the psychological method of testing and theory-formulation (positivist and neopositivist). Discrimination learning is a central issue in this field which actually stems from William James and Gestaltism. Variable behavior is seen as an interaction with environmental stimulation (Trabasso & Bower, 1968). Novelty and the fading out of old cues produces profound listening and learning. These detail specific researchers suggest more general theorizing is necessary to balance their Neopositivist theory and testing methods.

Maletzke (1963) has produced a traditional model that is typically Neopositivist in its one-way process. Although complex and prediction-less, his model has remained valuable for experimental research in social-psychology and mass communication. Multiple explanations create a timelessness and easy adaptability that is rare in Neopositivistic theory. See Appendix B for labeled model.

Another Neopositivistic theory that has been often verified in this methodology is the Programming Theory (Dilts, Grinder, Bandler, Bandler, & DeLozier, 1980). It tests neuro-linguistic programming by individuals by utilizing neuro-linguistic cues. Use of these cues will increase the likelihood that the information will be listened to and remembered. Questionnaires are used after given stimuli in the traditional manner (Hirsch, 1987). Signal Detection Theory is also valuable in listening research. Its origins are in the fields of speech and hearing sciences and applied linguistics.

Systems Theory and Modeling

An encompassing arc of inclusion is reassuringly provided by System theories and models. Interaction and Learning Competency Theory is one such umbrella. Its progressive formulation began with organizational communication interests in the business sector and the communication discipline. A direct interpolation from Systems Theory, entropy, has been used to manipulate effective listening dyads in laboratory research (Rhodes, 1987). Observational methods of data gathering are criticized as being too subjective and the

sample sizes were, typically, too small for effective generalizability. Effective listening is described as a goal pursuit (Rhodes, p. 37). Systems Theory provides stability, maintenance, growth, and readjustment principles. This utilization has enabled listening research to combine the extensive research of the 1950s and 1960s with that of the prolific and confident 1980s (p. 52).

Selective perception is important in the communication of different reactions. Organization and interpretation occur in listening acts. The decoding (listening) process certifies that a meaning is communicated (Severin & Tankard, 1992, p. 57). Kilpatrick (1953) spearheaded Systems applicability in this area by stating that perception involves active perceivers and an active world. Assumptions and cultural expectations are necessary. Motivation, mood, and attitude cannot be completely erased, even in highly trained individuals.

Kilpatrick's (1953) Transactional Perceptual Theory combines observational Phenomenology and functionalism. A clash is fostered by this eclectic theory for its empiricist and "super-Gestaltist" reliance (Kilpatrick's 1953 description). Human behavior cannot reduce observation to absolute objectivity, however. Kilpatrick does hold that one time where all aspects are contained in interdependent processes is (p. 89). Perceptual Theory is a part of a much broader Transactional Theory which entails implicit awareness, environmental constancy, continuity of experience, and complex integration.

There is a correspondence between real world objects and our perception. Experimentation reasons from object to organism. Physical stimuli are necessary, but not sufficient because external conditions are chosen for pattern in the listening process (Kilpatrick, 1961, p. 2). Transactional Theory presents living as a complex, evolving process within an indissoluble whole (p. 175). This theory actually employs elements from Phenomenology and Systems methodologies to formulate a ground-level Neopositivistic approach that is quite sensible and testable. Signal Detection Theory from the speech and hearing.

Effective listening training and development require a balance of attitude, skill and knowledge (ASK Model) enhancement. Specific and individualized assessment maximizes effective listening (personality, habit, ASK). The culminating motivation for Listening Skills Training is motivated by the S.I.E.R. Model (sensing, interpreting, evaluating, responding). The four stages of S.I.E.R. must occur in order, as activated by the listener. See Appendix C.

The progressive systems/rules methodology underlying this model has divided communication scholars into two camps: Those that affirm listening as a trainable, improvable activity and those

that do not. Educational and management development concerns cite this and similar models as justification for extensive effort in Listening Skills Training. The number one ranked competency critical for professional success in the 1970s was considered to be listening.

One last theory incorporated under the umbrella of Systems Theory is a rules perspective. R. G. Nichols and L. A. Stevens (1957) justified the teaching of listening skills in over 22 universities. Listeners were found to be more vulnerable than readers (p. viii). The methods of conversation analysis and discourse analysis produced the Theory of Conversational Listening with its four repetitious parts (pp. 74-76). Subject matter was discovered to be irrelevant, and listening improvement was thought to be possible with a semi-effortful exertion by the listener. The four parts of this inclusive theory are: (1) verification of status quo, (2) verification of future problems, (3) verification of who is affected, and (4) discussion of personalities. A brief subject change occurs and the process reinvents itself. The Nichols contribution is one of pragmatic and dedicated service to business and education sectors of international listening research.

Phenomenological Theory and Modeling

Phenomenology stimulates an even greater variety of theoretical wellsprings: The Hermeneutical, Historical, and a wide selection of Critical Theory ranging from Feminist and Rhetorical to Marxist viewpoints. Perception and listening processes have been studied from ancient Greece until today's scientific age. Comprehension-based theories stem from language, learning, and persuasion studies. Instructional communication employs classic Phenomenological work from the Existentialists and Wittgenstein back to Augustine, Quintilian, and Aristotle, perhaps inadvertently.

Surveillance and mindless states of consciousness have intrigued theorists in their search for understanding of these elusive acts (perception, attention, listening). Perception is influenced by wants, needs, attitudes, and far more (Severin & Tankard, 1992, p. 69). Theory and modeling in the methodological vein of Phenomenology, Hermeneutics, Historical, and Critical Theory are more sensitive to consciousness levels, description, interpretation, and influence.

Heidegger is most often cited as a formulator of the approach that is unlike all others in that he begins before the beginning of concepts. To bracket out all preconceptions and formulate an unshakable tenet of description is a formidable task of theory. Heidegger (1969) gave a lecture on "The Turning" in Bremen, December 1, 1949, in which he described the essence of enframing.

This concept is vital to any research on the topic of listening. Enframing is "that setting-upon gathered into itself which entraps the truth of its own *coming to presence* with oblivion" (p. 36). Coming to presence is the root, the indissoluble essence, of an act or thing. He speaks of destining and Being.

A later lecture given in Munich in August of 1954, reflects upon science as a method (Heidegger, 1969, p. 155). He then asserts that the Phenomenological approach is needed as a responding that forgets itself in the clarity of ceaseless questioning away at the "inexhaustibility of that which is worthy of questioning." Heidegger looks more closely at heeding (finally translated in the 1980s) by describing the *Dasein* or part of the hidden dwelling over which *Sorge* (sorrow) has been wandering. This *Dasein* participates in the play of unconcealing and hiding which is characteristic of being. Heeding is the *Dasein's* mode of participation in the aletheic "play" of being. In this heeding, the *Dasein* is never fully transparent to itself. Humans are neither god nor animal, free of destiny nor morally alive. Phenomenology is logically dependent on knowledge of this independent world (Hamlyn, 1961, p. 180). The appearance of things is consciousness.

Rhetorical Analysis falls under the rubric of Hermeneutics and Critical Theory. Three theorists of note in the 20th century are Richard M. Weaver, I. A. Richards, and Kenneth Burke. They spoke extensively on the act of listening and influenced communication practice, education and research. A synopsis by J. J. Floyd and R. G. Reese (1987) will balance the afore mentioned theoretical contributions of Phenomenology, Hermeneutics, and Critical Theory.

R. M. Weaver's theory contains important statement regarding the nature and significance of critical listening. I.A. Richards helps us to understand the nature and importance of comprehensive listening, particularly through his theory of interpretation. K. Burke's Dramatistic Theory and his concern with Identification contributes to our understanding of empathic listening. (p. 87)

Dubiously called technique, the Subliminal Perception Theory advanced the knowledge that humans could be influenced by stimuli of which they are not aware. Brief flashes of a message were intermittently flashed ("Eat popcorn" at 1/3,000 of a second during a regular movie) before an unknowing audience. This achieved a 57.5% increase in sales, yet no one was aware of or recalled the message. Its proponent, the Subliminal Projection Company, produced a wave of fear and legislative action in Australia, Great

Britain and the United States.

It also stimulated psychological research of awareness thresholds (Wiener & Schiller, 1960, Lazarus & McCleary, 1951, Beatty & Hawkins, 1989). Scientific research methods employing a control group design have, for the most part, failed to verify the theory (Class, 1958, Byrne, 1959, Berelson & Steiner, 1964). It therefore fails the Falsifiability and Predictive Power criteria (Chaffee & Berger). To verify the theory's roots in theological belief, an "I am honest" message was purported to cut the annual theft rate of a Louisiana department store from \$1.6 million to under \$900,000 (Garvin, 1978). Wilson Bryan Key's (1972, 1976) research results are also less scientifically-based, yet they utilize Freudian theory of sexual referent embeds (see also Rucker, 1984).

The theory does uncover much conjecture about low level attention and surveillance functioning in humans. The limitations of humans researching human communication ability is made evident by this methodological mix of hermeneutics, Marxist, and cognitive systems.

Pulling the Theories Together

Each of the three chosen methodological approaches can be exemplified by one theory or model: The Neopositivist methodology by Maletzke's Model of the Mass Communication Process, the Systems methodology by the S.I.E.R. Model, and the Phenomenological methodology by the Subliminal Perception Theory. For a clear graphic appraisal of theoretic components, see Appendix D, A Comparative Chart of the Maletzke Model, the S.I.E.R. Model, and the Subliminal Perception Theory. The Dubin, Chaffee, and Berger criteria of critiquing were merged to provide categories of comparison. This labeling employs Weaver's descriptive level of communication as a means of the highest order of persuasion. By reducing the models and theory to component parts and functions, an assessment instrument of sound criteria is formed (Husserl's and Heidegger's Phenomenology of Essence and reduction).

A systems methodological approach seems to be a common, workable apparatus for pulling the exploratory thought together. The Maletzke, Steil, and Vicary products assert that listening produces behavior; Vicary's, and perhaps Maletzke's, at a subliminal threshold, Steil's at varying levels of awareness. Real world testing has shown these models/theory to be valid, but more research of a clear and precise nature should be attempted. None serve to unify listening research, yet all have withstood the test of time.

Multiple hypotheses with all the creativity of divergent fields and dubious motivations are being formulated. The joint products

of listening theories would be reassuringly eclectic as suggested by Dubin (p. 276). It is crucial to discover how subliminal listening is identified as a communication activity, and then to devise training procedures for enhancing listening in all its stages.

These theories must be moved out of their belief, descriptive, or grand theory status by sharpening the unit descriptors to enumerative, associative and statistical indicators. The Maletzke Model's domain is far too complicated. Pages of explanation are needed to clarify ambiguous terms like receiver personality and public character. The Steil Model's domain falls to the opposite extreme. Simplicity in state coordinate appraisal omits definitions that are definitive and necessary for testing. The Vicary Model's domain needs limiting factors. It is the theorist's duty to provide such a component as boundary condition and closure. Carefully limiting their domains by the suggested propositions would produce middle range theories of acceptable generalizability and efficiency.

Phenomenological research would aid in more effective operationalization, and empirical, received view research can add standardization of such common terms as interpretation and response. Researcher bias must be eliminated for the Subliminal Theory, as it is generally accepted as unfounded by the scientific community. Good teaching can only benefit by listening to what business sectors have to offer in the way of pragmatic research methods. I would test the models/theory by examining the theorist behind each. A lifetime of dedication and scientific rigor to the cause of listening should produce quality knowledge and insight worthy of emulation. Replication of an entire life of research is impossible, yet peer-acclaim and pragmatic adoption of the principles discovered in these contributions can be utilized as a verification tool. Replication of the conceptual bases can only be done by human affirmation within recorded lifetimes. Time alone tests the wisdom of human beings as they research and theorize about human communication.

The Methods Employed for Testing

Testing for model/theory validity has occurred by four major methods (Brewer & Hunter, 1989). They are classified as (1) the experimental, (2) the survey, interview, or testing method (Feyten, 1990, Atwell, 1993, Brown, 1950, 1966), (3) observational fieldwork (Kinsbourne & Caplan, 1979), and (4) nonreactive methods such as content analysis of artifacts. My personal preferences would be a combination of the second and fourth with rigor, and then the third by personal, relaxed observations over a lifetime of knowledge growth. Nearly all of the listening viewpoints mentioned in this paper have been tested by the first method (experimental), and of course, the third (personal, relaxed observation over a variable

segment of knowledge growth in the researcher). Because of this weighty amount of testing by one predominant method (Goldstein, 1940, Vinson & Johnson, 1990), I have chosen to critique an example of listening behavior research conducted by A. J. Clark's (1989) Sub-Threshold Auditory Stimuli in Listening article.

The strongest method of research for testing causal hypotheses is experimentation. The manipulation and control of variables, and the random assignment of subjects provide high internal validity. Faulty external validity can be introduced by the limitations of subjects, settings and times available, reactivity, and artificial procedures (Brewer & Hunter, 1989, p. 161). Experimentation, however, is feasible for the testing of alternative theoretical interpretations.

Anthony J. Clark (1989) begins his perceptive and extensive literature review with listening research in 1863. This solid base of theory and received view methodology is typical of exemplary experimental research. He notes a problem in terminology at the onset of his study by correcting the historical shift in the use of the term, subliminal perception. Psychoanalytic use of hypnotism and dream-states had raised controversy over its connotative meaning. He also seeks to avoid the audiology term definitions of detectability, intelligibility and perceptibility. Although operationalizations are clear, little progress has been made to integrate other methodological schools of thought or even, other experimental studies.

The study is testing a model of the researcher's own evolution of scientific thought. The boundaries are established by deliberate manipulation and supposition. No outside references for the source of his six hypotheses are given. The purpose of the exploratory study was to determine whether subception could be observed in listening behavior.

A fair gender-mix of 340 undergraduate communication students reveals another shortcoming of the experimental method. Sample representiveness is questionable due to the subject availability, willingness and randomized assignment into control and treatment groups.

The results failed to corroborate whether subception could be observed in listening. Careful scheduling of controlled conditions failed to generate the necessary data. Even though the measured effects revealed no significance, the study did not eliminate the possibility of subception entirely. Innovative research was called for by the researcher. The experimental method obviously lacked realism by its super-control of extraneous listening factors (subjects were placed in sound-proof booths and could not move their heads). Real subliminal listening (subception) may not have occurred.

The experiment generated data in a controlled process. Experimenter bias in operationalization as well as hypothesized scope and subject interaction (the subjects viewed the researcher during the entire recording) could not be avoided. The nature of the method is restrictive because a limitation was placed on the wealth of material which preceeded the theory itself.

Another restriction was the use of the English language and confidence scores. The researcher chose well-known English words that could easily have had reaction potential for the individual subjects. The confidence scores (Clark's term for subject assurance of correct answering) were employed as a check for wild guessing vs truly subliminal perception, an area difficult to ascertain by any research method, even self-report. This could have produced a high rate of reliability for each subject response, but a more likely result was self-reporting of non-subliminal perception. Reliability scores for the measurement of Group Mean Word Recognition (Table 1) reveal no subception effect across the treatment conditions at any level of intensity. Sub-Threshold Expressed in Percentages of Detection/Total Trials (Table 2) scores reveal only one significant difference, that between the NO-Noise condition at the 0 dB level and the 0 Signal-to-Noise condition at the -5 dB level.

Although less cost in wasted time and useless data was evident, extensive researcher involvement in the earlier stage of the research provided high internal validity. Independent variables made a difference in this research: Causal hypothesis testing ruled out "irrelevant" variables by blocking, holding constant, and randomizing in treatments. Rival hypotheses were clearly beyond the capacity of the experiment. The claims for subliminal perception remain largely unproven, yet they can not be satisfactorily disproved by the experimental method of research.

Recommendations and Conclusion

Cultural and background differences arise in communication setting and timing. Maturity and social awareness of others is difficult to measure because of the variability of humans. Innate human intelligence directed toward the self and others has been approached from many areas of scholarship unaware of communication endeavors. Practical needs of the populace and monetary or personal gain shape the listening patterns of individuals. These are not easily understood or changed. It is therefore recommended that listening research and theorizing should entail a wide, overlapping choice of multimethod testing at all stages of the research process, and of course, the corroboration of fellow scientists with a variety of methodological orientations.

The listening research of the 1950s switched from a defense

to a confident seeking of what lies at the heart of the receiving aspect of communication (Keller, 1966). This heartily endorsed Phenomenological methodology's descriptive theories (Petrie, 1961). Listening can best be described as a dynamic, psycho-physical process with overlapping angles of perception. Because it is a creative act, future possibilities for its research are endless (Eadie's 1993 sound in virtual reality interest).

Table 1

Group Mean Word Recognition Scores

Group Mean Word Recognition Scores
TABLE 1

	No-Noise	0 s/n	-5 s/n
0 dB	.372	.760	.620
-5 dB	.489	.760	.500
-10 dB	.644	.660	.560

Table 2

Sub-Threshold Scores Expressed in Percentages
of Detection/Total Trials

Sub-Threshold Scores Expressed in Percentages of Detection/Total Trials

TABLE 2

	No-Noise	0 s/n	-5 s/n
0 dB	.305	.100	.192
-5 dB	.202	.060	.112
-10 dB	.098	.056	.016

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Appendix A

International Listening Association brochure

Focus on . . . THE FUTURE

An active Archives Committee keeps ILA's history alive with conference videotapes, a library of textbooks, and other documents. ILA's focus, however, is on the future.

The association's impact has been felt by local and state governments, public and private educational institutions, and all aspects of the business community. As ILA moves closer to its goals, listening is emerging as a significant field, recognized for its influence on all human activities. In our rapidly changing environment, the ability to listen becomes key to personal and professional effectiveness. As we strive to create a global community, the nature of our relationships will be directly affected by our ability to listen.

The ILA organization is growing. Its focus is on bringing you together with others who share a common purpose and on creating an environment that will stimulate you to become even more informed, productive, and committed to promoting the study and practice of effective listening.

"The greatest compliment that was ever paid me was when one asked me what I thought, and attended to my answer."

26 Henry David Thoreau

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Lof



International
Listening
Association

*"The most basic of all
human needs is to
understand and to be
understood. . . The best
way to understand people
is to listen to them."*

Ralph Nichols

Diversity

With A Focus



Listening Association

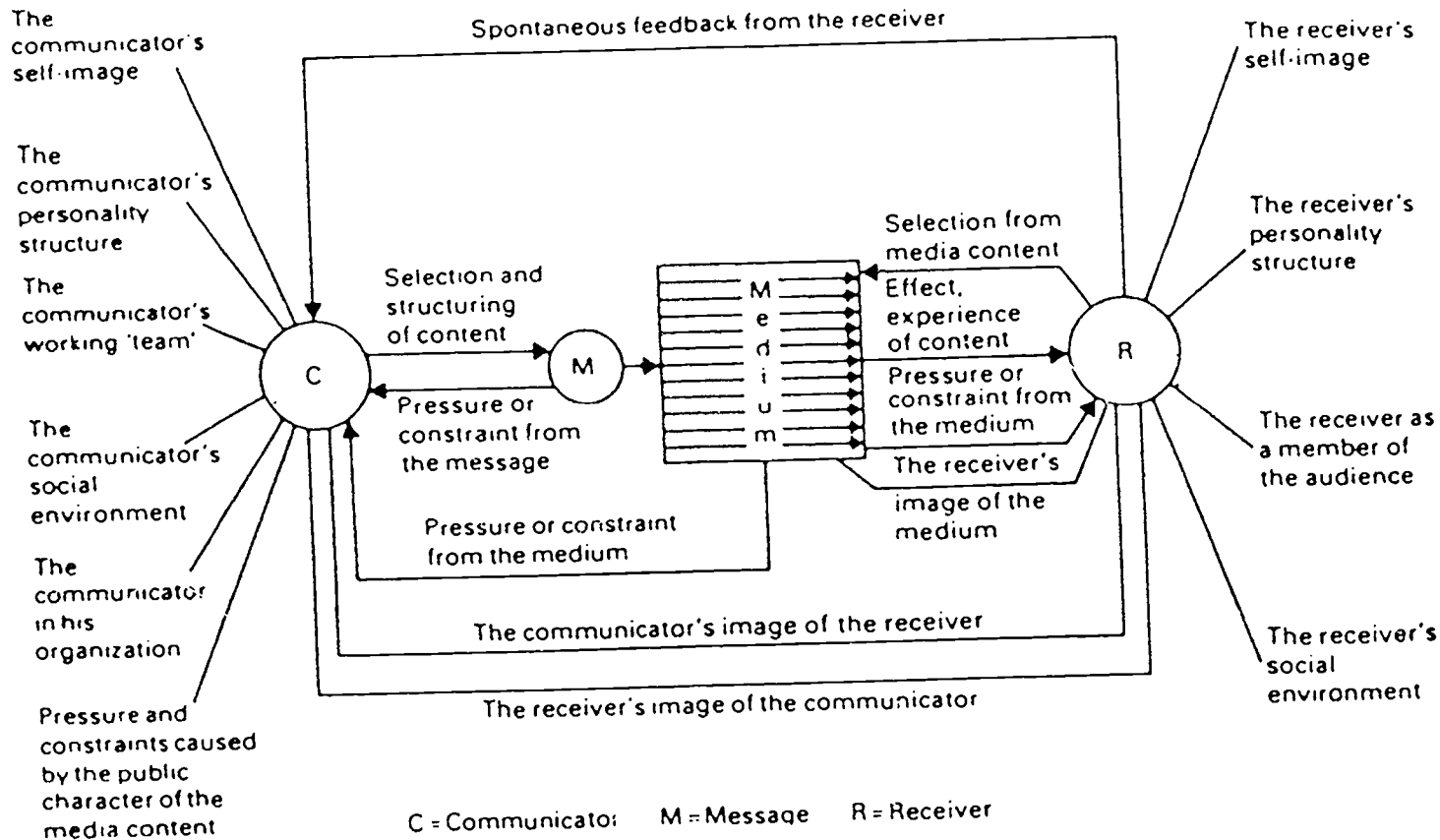
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Appendix B

The Complete Maletzke Model (1963)



Appendix C

The Listening ASK Model

Listening Definition

S.I.E.R. Model

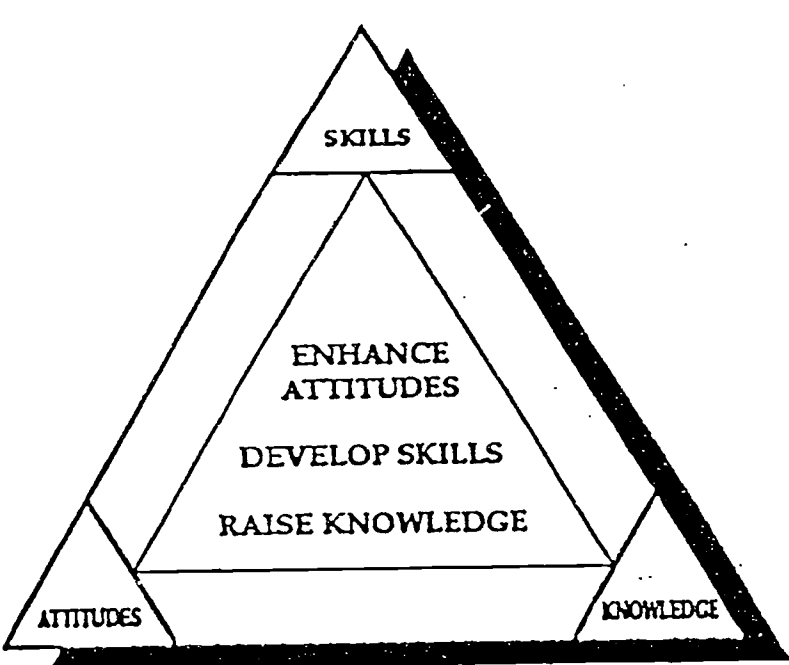


Figure 1. Listening ASK Model

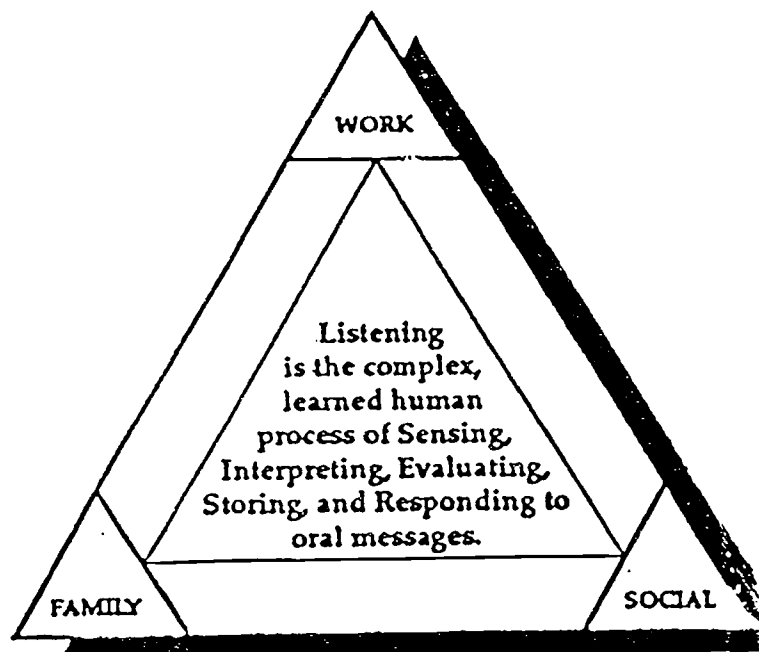


Figure 2. Listening definition.

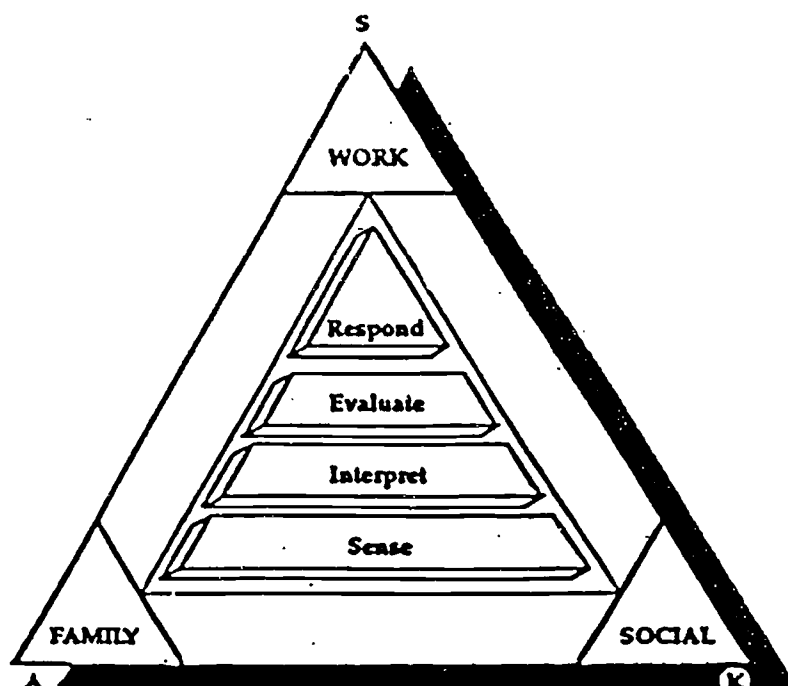


Figure 3. S. I. E. R. Model

Appendix D

The Vicary/Steil Comparison Chart

VICARY/STEIL COMPARISON
by Dubin & Chaffee & Berger criteria

SUBLIMINAL PERCEPTION T. S.I.E.R. MODEL

Theory/Research Feedback	Herm/Marx/Systems	Rules/Systems
U N I T S	Enumerative, Statistical	Associative, Summative
TIMING	1957, 1972, 1976, 1978, 1984	1977, 1983, 1991
LAW of INTERACTION	Categoric	Sequential
TYPE	Belief	Descriptive
DOMAIN	Grand (needs limiting factors)	Grand (State Coordinates are too simply stated)
PROPOSITIONS	Extend to sight, hearing, ESP	Extend to age, counsel, group
HYPOTHESES	Emotional element surrounding research/Corroboration failure	Pragmatic in management & Ed Cannot be tested
POWER	Pseudo-predictive Heuristic Internally Consistent	Explanatory Heuristic Organizing Internal Overlap of Terms
EMPIRICAL INDICATORS	Psychology Mass Communication Advertising	Phenomenology Instructional Communication Communication Sciences & Disorder Language Acquisition
TEST METHODS	Laboratory & Field Observation Interview	Field Observation Interview Standardized Testing